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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,330	09/16/2003	Takashi Ohira	Q77492	9180
23373	7590	09/05/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TSOY, ELENA	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/662,330

Applicant(s)

OHIRA, TAKASHI

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/16/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 1, drawn to a method for preparing a golf ball, classified in class 427, subclass 508.
  - II. Claim 2, drawn to a golf ball, classified in class 428, subclass 411.1.

***Distinctness***

The inventions are distinct, each from the other because:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as by heating.
3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with John T. Callahan on August 8, 2006 a provisional election was made without traverse to prosecute the invention of Croup 1, claim 1. Affirmation of this election must be made by applicant in replying to this Office action. Claim 2 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crast et al (US 6,165,564) in view of Jin et al (US 20020016226), further in view of Lokai et al (US 6319983), and further in view of Nealon et al (US 5,300,325).

Crast et al disclose a method for preparing a golf ball having polyurethane top coating formed from UV-curable coating (See column 8, lines 56-57) comprising applying the UV-curable coating (claimed UV-curable paint) to a **primer**/basecoat on an *ionomeric* cover 16 of a golf ball 10 (See column 4, lines 11-17; column 7, lines 18-19). The UV-curable coating comprises polyether acrylates and urethane acrylate oligomers (See column 4, lines 28-32).

Crast et al fail to teach that a primer composition comprises an aqueous resin having UV-curable functional groups in a molecule and a crosslinker.

Jin et al teach that a solvent-free (See P36) UV-curable coating comprising urethane acrylate oligomers (See P24) having UV-curable acrylate double bond (See P23), reactive diluent (See P30-31) and polyfunctional aziridines (claimed crosslinker (See P14) has enhanced adhesion to an ionomer substrate (See P41) and particularly suitable for golf ball application, wherein the golf ball comprises an ionomer resin layer (See P39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used UV-curable coating of Jin et al as a primer in Crast et al with the

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expectation of providing the desired enhanced adhesion to an ionomer cover, as taught by Jin et al.

Jin et al fail to teach that UV-curable coating composition can be formulated as water based composition without the use of the reactive diluent.

Lokai et al teach that one possibility to reduce the amount of reactive diluents added, or to do without them entirely, is to use aqueous, radiation-curable binder dispersions (See column 1, lines 25-27). In other words, Lokai et al teach that a coating composition having reactive diluents may be formulated as a water based composition having the same properties.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a UV-curable coating composition of Jin et al formulated as a water based composition as a primer in Crast et al with the expectation of providing the same desired enhanced adhesion to an ionomer substrate as with reactive diluents since Lokai et al teach that a coating composition having reactive diluents may be formulated as a water based composition having the same properties.

Crast et al fail to teach that both the primer layer and the UV-curable top coating are irradiated with UV radiation.

Nealon et al teach that a polyurethane top coat tightly adheres to an ionomeric cover of golf ball if a polyurethane top coat and an aqueous primer layer are co-cured (See Abstract; column 4, lines 52-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have co-cured a polyurethane top coat and an aqueous primer layer in Crast et al in view of Jin et al in view of Lokai et al with the expectation of providing the desired tight

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adherence of the polyurethane top coat to an ionomeric cover of golf ball since Nealon et al teach that a polyurethane top coat tightly adheres to an ionomeric cover of golf ball if a polyurethane top coat and an aqueous primer layer are co-cured.

### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy  
Primary Examiner  
Art Unit 1762

ELENA TSOY  
PRIMARY EXAMINER  
*ETsoy*

August 31, 2006